## Lawrence Livermore National Laboratory's

## **Green Buildings**

In 2009 one of Lawrence Livermore National Laboratory's buildings became the first in the U.S. Department of Energy complex to achieve certification as a green building under the U.S. Green Building Council's (USGBC) new rating system for existing buildings.

The designation is granted only to buildings that demonstrate superior performance in five principal areas: sustainable site development, water savings, energy efficiency, waste management/sustainable purchasing and indoor environmental quality.

The U.S. Green Building Council is a nonprofit membership organization that promotes a sustainable building environment within a generation. USGBC is dedicated to expanding green building practices and education, and its LEED® (Leadership in Energy and Environmental Design) Green Building Rating System<sup>TM</sup>. There are several rating systems currently in place, including new construction, commercial interiors and schools; the existing building-operations and maintenance track was just formalized recently.

The Laboratory's Building 264 provides office space for LLNL's Operations & Business Facilities Management group and the Environment, Safety, Health & Quality organization. It was LEED certified following nearly five months of review by USGBC. The review addressed areas such as recycling, plumbing fixtures and fitting efficiency, water efficient landscaping, storm water management, energy efficiency best management practices, sustainable purchasing, indoor air systems, cleaning products and materials and refrigerant management — ozone protection.

The Laboratory is currently in the process of preparing submittals for LEED certification for two additional buildings: a building (Building 142) that houses offices for the Science and Technology Directorate and the Terascale Simulation Facility (Building 453), which houses the Laboratory's array of supercomputers. The Terascale facility will be unique, since there currently is no prescribed method for certifying a supercomputing datacenter.